

**PRODUCTION OF COATED PHOSPHOR**

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**Abstract of JP6306356**

**PURPOSE:** To obtain a coated phosphor excellent in luminance, luminescent lifetime and their persistency by forming a silica coating film having a low hydroxyl content and excellent water barrier properties without causing the thermal or the like deterioration of the phosphor.

**CONSTITUTION:** The title production process comprises diffusing a fluoroorganosilane of the general formula:  $\text{FnSiR}_{4-n}$  wherein R is alkyl or alkoxy, and n is an integer of 1-3 into a hydroxy silica film 2 which covers a powder 1 of a phosphor to effect the condensation reaction of the silane with the silica film through dehydration at a low temperature to form a coated phosphor. According to this process, a dense coating silica film having water repellency owing to fluorine can be formed, and the obtained silica coated phosphor can therefore resist to moisture deterioration.



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